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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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020306 TM02/0327
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EXAMINER

BASHORE, W

ART UNIT

PAPER NUMBER

2176
DATE MAILED:

03/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/129,308

Applicant(s)

Whiteledge et al.

Examiner
William L. Bashore

Group Art Unit
2176



☒ Responsive to communication(s) filed on Sep 28, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-20 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2, 4-7

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

1. This action is responsive to communications: original application filed on 10/13/1998. IDS filed on 10/13/1998 (paper #2), 3/4/2000 (paper #4), 4/13/2000 (paper #5), 5/23/2000 (paper #6), and 9/28/2000 (paper #7).
2. Claims 1-20 are currently pending in this case. Claim 1, 15, 20 are independent claims.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: Method And System For Content Conversion Of Electronic Hypertext Data Using Data Mining.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al. (hereinafter Madnick), U.S. Patent No. 5,913,214 issued June 1999, in view of Kurz, A., Data warehousing within intranet: prototype of a web-based executive information system, IEEE Database and Expert Systems Applications, September 1-2, 1997, pp.627-632.

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In regard to independent claim 1, Madnick teaches:

- a first network incorporating a plurality of network devices (Madnick Figure 6 item 612) connected to a second network with a plurality of network devices (Madnick Figure 6 items 102, 300, 400, also column 4 lines 19-25; compare with claim 1 preamble *"In a first network with a plurality of network devices connected to a second network with a plurality of network devices, a method of content conversion"*).

- a Wrapper Generator on a single computer comprising a Data Retriever, fetches a web page from an Internet web site (Madnick Figure 6 items 614, 620, and 612", see also column 9 lines 48-52, 62-67; compare with claim 1 *"receiving a first hypertext electronic document on a second network device on a first network, from a third network device on a second network"*).

- a descriptor file customized for interaction and data extraction with a retrieved web page (Madnick column 10 lines 15-25, column 12 lines 5-11, table 2; compare with claim 1 *"creating a document object model from the first hypertext electronic document"*).

- a HTML descriptor file containing additional embedded tags, said tags providing extra information to the Wrapper Generator (Madnick column 15 lines 54-65; compare with claim 1 *"extracting one or more selected hypertext elements from the document object model..."*).

- using said additional embedded tags, along with the rest of the specification file, for web data extraction and conversion to a result data set (Madnick column 15 lines 60-67, column 16 lines 1-3; compare with claim 1 *"converting one or more extracted hypertext elements..."*).

- Madnick does not specifically teach creation of a second hypertext document including converted elements. However, Kurz teaches final HTML output display (Kurz p.629 Presentation layer; also p.631 specifically in Figure 4; compare with claim 1 *"creating a second...converted hypertext elements"*). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to apply the final HTML page presentation to the utilization of the embedded tags and web page data accessing of Madnick, because of Kurz's taught advantage of final web display, providing a familiar presentation of data to the returned data sets of Madnick.

- Madnick does not specifically disclose data mining , or a data mining conversion language. However, these two limitations would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Madnick, because Madnick deals with various data extractions (using specialized wrapper generation incorporating specification files), from disparate network sources (ie. web pages, network databases, etc.) for returning result sets of information, which clearly suggests a data mining embodiment (incorporating a language for its implementation), and providing the advantage of information retrieval from different sources (Madnick column 2 lines 28-43; compare with claim 1 "*...data mining expressions*", and "*data mining conversion language*").

In regard to dependent claim 2, Madnick teaches returning data sets to a Data Receiver (Madnick Figure 6 items 102, 400; compare with claim 2).

In regard to dependent claim 3, Madnick teaches a CD-ROM embodying Madnick's invention (Madnick column 16 lines 17-21; compare with claim 3).

In regard to dependent claim 4, Madnick does not specifically teach saving references to a symbol table. However, Kurz utilizes parsing and identification of tokens; along with regular expressions

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using LEX and YACC, which strongly suggests a text compiler which uses symbol tables (Kurz p.163 item 3.1.1, p.164 Table 1; compare with claim 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Kurz to Madnick, because of Kurz's taught advantage of compiler strategy using symbol tables, providing parsing capabilities to Madnick..

In regard to dependent claim 5, Madnick teaches saving elements in a specification file (Madnick column 12 Table 2; compare with claim 5).

In regard to dependent claim 6, Madnick teaches data extraction from a plurality of web sources (Madnick column 13 lines 26-29; compare with claim 6).

In regard to dependent claim 7, Madnick teaches a specification file as a template (Madnick column 13 lines 34-36; compare with claim 7).

In regard to dependent claim 8, Madnick teaches variables addressed as various symbols (Madnick column 12 Table 2 items 0&, A#; compare with claim 8).

In regard to dependent claims 9, 10, Madnick teaches a Query Converter, Command Transmitter, and Data Retriever utilizing web document servers on the Internet (Madnick Figure 6 items 612, 612", 614; compare with claims 9, 10).

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In regard to dependent claim 11, Madnick teaches a specification file declaring TYPE: WEB (Madnick column 12 Table 2, near top of table; compare with claim 11.

In regard to dependent claim 12, Madnick teaches CGI, a form of script (Madnick column 14 lines 28-32; compare with claim 12).

In regard to dependent claims 13, 14, Madnick teaches using additional embedded tags, along with the rest of a specification file, for web data extraction and conversion to a result data set (Madnick column 15 lines 60-67, column 16 lines 1-3). Madnick does not specifically teach creation of a second hypertext document including converted elements. However, Kurz teaches final HTML output display (Kurz p.629 Presentation layer, also p.631 Figure 4; compare with claims 13, 14). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the final HTML page presentation to the utilization of the embedded tags and web page data accessing of Madnick, because of Kurz's taught advantage of final web display, providing a familiar presentation of data to the returned data sets of Madnick.

In regard to independent claim 15, Madnick teaches:

- a first network incorporating a plurality of network devices (Madnick Figure 6 item 612) connected to a second network with a plurality of network devices (Madnick Figure 6 items 102, 300, 400, also column 4 lines 19-25; compare with claim 15 preamble "*In a first network with a plurality of network*

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devices connected to a second network with a plurality of network devices, a method of content conversion”).

- a Wrapper Generator on a single computer comprising a Data Retriever, fetches a web page from an Internet web site subsequent to receiving a request from a user (Madnick Figure 6 items 102, 614, 620, and 612”, see also column 9 lines 48-52, 62-67; compare with claim 15 “*receiving a request for first hypertext electronic document on a second network device on a first network, from a first network device on the first network*”).

- a descriptor file customized for interaction and data extraction with a retrieved web page, a HTML descriptor file containing additional embedded tags, said tags providing extra information to the Wrapper Generator, and utilization of said additional embedded tags, along with the rest of the specification file, for web data extraction and conversion to a result data set (Madnick column 10 lines 15-25, column 12 lines 5-11, column 15 lines 54-65, 60-67, column 16 lines 1-3, table 2; compare with claim 15 “*applying a data mining conversion language....one or more converted hypertext elements*”).

- Madnick does not specifically teach creation of a second hypertext document including converted elements. However, Kurz teaches final HTML output display (Kurz p.629 Presentation layer, also p.631 Figure 4; compare with claim 15 “*creating a second...converted hypertext elements*”). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the final HTML page presentation to the utilization of the embedded tags and web page data accessing of Madnick, because of Kurz’s taught advantage of final web display, providing a familiar presentation of data to the returned data sets of Madnick.

- returning data sets to a Data Receiver (Madnick Figure 6 items 102, 400; compare with claim 15 “*sending the second....electronic document*”).

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- Madnick does not specifically disclose data mining , or a data mining conversion language.

However, these two limitations would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Madnick, because Madnick deals with various data extractions (using specialized wrapper generation incorporating specification files), from disparate network sources (ie. web pages, network databases, etc.) for returning result sets of information, which clearly suggests a data mining embodiment (incorporating a language for its implementation), and providing the advantage of information retrieval from different sources (Madnick column 2 lines 28-43; compare with claim 15 “...data mining conversion language”).

In regard to dependent claim 16, Madnick teaches a CD-ROM embodying Madnick’s invention (Madnick column 16 lines 17-21; compare with claim 16).

In regard to dependent claim 17, Madnick teaches a Query Converter, Command Transmitter, and Data Retriever for fetching pages from a document server on the Internet (Madnick Figure 6 items 612, 612”, 614; compare with claim 17).

In regard to dependent claims 18, 19, Madnick teaches variables addressed as various symbols (Madnick column 12 Table 2 items 0&, A#; compare with claims 18, 19).

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In regard to independent claim 20, Madnick teaches:

- a Wrapper Generator on a single computer comprising a Data Retriever, fetches a web page from an Internet web site subsequent to receiving a request from a user (Madnick Figure 6 items 102, 614, 620, and 612", see also column 9 lines 48-52, 62-67; compare with claim 20 "*a content converter....conversion language*").

- a descriptor file customized for interaction and data extraction with a retrieved web page, a HTML descriptor file containing additional embedded tags, said tags providing extra information to the Wrapper Generator, and utilization of said additional embedded tags, along with the rest of the specification file, for web data extraction and conversion to a result data set (Madnick column 10 lines 15-25, column 12 lines 5-11, column 15 lines 54-65, 60-67, column 16 lines 1-3, table 2; compare with claim 20 "*a document object model for storing hypertext elements of a first hypertext electronic document*").

- a Wrapper Generator on a single computer (proxy) comprising a Data Retriever, fetches a web page from an Internet web site subsequent to receiving a request from a user (Madnick Figure 6 items 102, 614, 620, and 612", see also column 9 lines 48-52, 62-67; compare with claim 20 "*a proxy server....electronic documents*").

- Madnick does not specifically teach creation of a second hypertext document including converted elements. However, Kurz teaches final HTML output display (Kurz p.629 Presentation layer, also p.631 Figure 4; compare with claim 20 "*a second hypertext electronic document*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the final HTML page presentation to the utilization of the embedded tags and web page data accessing of Madnick, because of Kurz's taught advantage of final web display, providing a familiar presentation of data to the returned data sets of Madnick.

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- Madnick does not specifically disclose data mining , or a data mining conversion language.

However, these two limitations would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Madnick, because Madnick deals with various data extractions (using specialized wrapper generation incorporating specification files), from disparate network sources (ie. web pages, network databases, etc.) for returning result sets of information, which clearly suggests a data mining embodiment (incorporating a language for its implementation), and providing the advantage of information retrieval from different sources (Madnick column 2 lines 28-43; compare with claim 20 "data mining conversion expressions", and "...*data mining conversion language*").

Conclusion

4. **Prior art made of record and not relied upon is considered pertinent to disclosure.**

Gupta et al. U.S. Patent No. 5,826,258 issued October 1998

Ashish, N et al., Semi-automatic wrapper generation for Internet information sources, IEEE Cooperative Information Systems, 6/1997, pp.160-169.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bashore whose telephone number is (703) 308-5807. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (703) 308-5186. The fax number to this art unit is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

or:

(703) 305-9724 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

**Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).**

William L. Bashore
3/24/2001


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